

AMENDMENTS TO THE CLAIMS:

Please cancel claims 7-9, without prejudice. Kindly amend claims 1 and 3-6 , as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (currently amended): A voltage control circuit for a common mode voltage, comprising:

a detection circuit for detecting a common mode voltage from differential output terminals of a differential output circuit, and outputting a detected voltage based on the common mode output voltage; and

an operational transconductance ~~circuit~~ amplifier for inputting the detected voltage and a first reference voltage, and inputting/outputting currents ~~based on~~ in proportion with a voltage difference between the detected voltage and the first reference voltage,

wherein the currents inputted/outputted to/from the operational transconductance ~~circuit~~ amplifier are inputted/outputted to/from a differential output of the differential output circuit.

Claim 2 (original): The voltage control circuit for the common mode voltage according to claim 1, wherein the first reference voltage is a constant voltage determined in advance.

Claim 3 (currently amended): The voltage control circuit for the common mode voltage according to claim 1, wherein the currents inputted/outputted to/from the operational transconductance ~~circuit~~ amplifier are flowed into the differential output to decrease the common mode output voltage from the differential output terminals, and led from the differential output to increase the common mode output voltage from the differential output terminals.

Claim 4 (currently amended): The voltage control circuit for the common mode voltage according to claim 1, wherein the currents inputted/outputted to/from the operational transconductance ~~circuit~~ amplifier are inputted/outputted to/from the respective differential output terminals.

Claim 5 (currently amended): The voltage control circuit for the common mode voltage according to claim 1, wherein the operational transconductance ~~circuit~~ amplifier inputs/outputs multiple currents of the same phase, and the respective multiple currents of the same phase are inputted/outputted to/from the respective differential output terminals.

Claim 6 (currently amended): The voltage control circuit for the common mode voltage according to claim 1, wherein the currents inputted/outputted to/from the operational transconductance ~~circuit~~ amplifier are flowed into the differential output terminals when the common mode output voltage from the differential output terminals is larger than a predetermined voltage, and led from the differential output terminals when the common mode output voltage from the differential output terminals is smaller than the predetermined voltage.

Claims 7-9 (canceled)

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